San Pablo Bay Watershed Restoration Study - Project Study Plan

Restoration Plan Database:
Crystal Reports of Individual Plan Summaries

I. BASIC PLAN DATA

Plan name:

San Pablo Bay Watershed Restoration Study - Project Study Plan

Brief description of plan:

The San Pablo Bay Watershed Restoration Study Project Study Plan (PSP) describes the scope, schedule, and costs associated with ecological restoration within San Pablo Bay watershed in California. The watershed study process will use collaborative partnerships that have developed throughout the region to identify near, mid, and long-term potential restoration opportunities and provide the technical, planning, and design analysis to foster project development. The San Pablo Bay watershed drains into the northern reaches of San Francisco Bay and is a major drainage basin for Marin, Sonoma, Napa, Solano and Contra Costa Counties, California. A unique feature in the San Pablo Bay watershed is the large tracts of historical baylands-diked and tidal, particularly along the perimeter of the Bay and adjacent to the Sonoma Creek, and the Petaluma River and Napa River. Some of these diked baylands include important seasonal wetlands. Approximately one-half of the diked historic baylands are publicly owned, principally by wildlife and military agencies and special purpose districts such as flood control districts.

Region the plan is located within:

Pacific Region

Watershed(s) included within the plan:

PO93x

Area plan covers (in square miles):

810.00 square miles

Plan scale:

Multi-county

Plan's lead organization(s):

U.S. Army Corp of Engineers, Coastal Conservancy of California

Plan's Main Contact Information:

Roger Golden
Wastershed Coordinator
U.S. Army Corps of Engineers
San Pablo Bay
1600 Broadway, Suite 300
Oakland, CA 94612
415-977-8703
510-452-9266
savebay@savesfbay.org
www.savesfbay.org

On-line version of plan:

Date of original plan:

9/1999

II. TECHNICAL INFORMATION

Plan includes restoration goals: N

Plan recommends or uses criteria for selecting restoration sites (e.g. cost benefit ratio, ecological benefits):

Y

Summary of the criteria:

Various projects will be identified through the study process and may be implemented through existing authorities such as the Civil Works Program of the Corps, the Watershed Protection and Flood Prevention Program of the Natural Resources Conservation Service, the Hazard Mitigation Grant Program of the Federal Emergency Management Agency, the Environmental Protection Agency and Water Quality Control Board Clean Water Act grant programs, as well as the Coastal Conservancy, the National Marine Fisheries Service, the Department of Fish and Game, and other public or private funding programs, and through new authorities where necessary. Preferences should be placed on habitat types that are in greater need of restoration and protection. For example, intertidal wetlands should be given preference where conditions are suitable because of the extremely limited opportunities for creation. Preference should be given to the restoration of large sites, capable of providing the complexity of habitat, highest channel order, and ecosystem resilience. Also, a high priority will be placed on the benefits of potential restoration sites that have willing partners. Evaluation criteria will be established to eliminate potential restoration opportunities that are manifestly not technically feasible, do not meet established objectives, or which violate physical, economic, and institutional constraints. The screening process will evaluate the completeness, technical feasibility, ability to meet objectives of this study, as well as other evaluation criteria. Environmental costs and beneficial outputs for each watershed restoration opportunity will be assessed.

Plan recommends restoration of specific project sites:

Y

Plan includes a discussion of funding sources:

Y

Plan addresses long-term protection of restored sites:

Y

Partners included in developing the plan:

Federal
State
Local
Business/Industry
Non-profit Organizations
Academia
Foundations
Private landowners

Type(s) of public outreach included during plan development:

Held public workshops, meetings, open house, or scoping meetings
Held focus groups
Developed a Web site to inform public and/or seek public input
Kept a contact list of interested parties
Mailed or e-mailed information to a contact list
Distributed brochures or other materials
Involved the media through news releases, public service announcements, etc.

Plan includes public outreach as part of plan implementation (e.g. annual public meeting, local group participation):

Y

Plan discusses the application of innovative approaches to restoration:

Y

Summary of the discussion:

Existing planning, scientific, and technical data will be used to identify and prioritize restoration activities. There will be a preliminary review and update of existing aerial photographs, topographic and GIS mapping with newer technologies. There may be a need for new technical information, which may include general mapping of watershed attributes and surveying, and aerial mapping of important features of the potential restoration projects.

Plan make use of GIS mapping capabilities:

Y

Plan addresses monitoring/reference sites for ecosystem level monitoring (baseline conditions) by:

G

Plan addresses monitoring/reference sites for project level monitoring by:

G

The plan discusses or coordinates with other restoration plans covering the same geographic area:

Y

Other plan names:

Bay Area Watersheds Science Approach, California Salmonid Stream Habitat Restoration Manual, California Wetlands Conservation Policy, Comprehensive Conservation and Management Plan, Fremontia-Special Issue: Weeds, Goals and Objectives for a □Living□ Napa River System, Handbook on California and Federal Wetlands Regulation, Long-term Management Strategy for Dredging and Dredged Material Disposal in the San Francisco Bay/Sacramento-San Joaquin Delt Estuary, Napa River/Napa Creek Flood Reduction Project (Supplemental General Design Memorandum), Napa River Watershed Owner□s Manual, North Bay Corridor Study, North Bay Forum, North Bay Wetlands Protection Program, Partnership for San Pablo Baylands, SF Bay Conservation and Development Commission Strategic Plan, SF Bay Joint Venture, SF Bay Plan, SF Bay Water Quality Control Plan (Basin Plan), SF Bay Estuary Baylands Ecosystem Goals, Watershed Management Initiative Integrated Plan, Wetlands in the North Bay Planning Area

Plan contains detailed information on historic and/or current habitat size, rate of loss, acres restored or protected, etc.):

Y

Summary of this habitat information:

Wetland Habitat:
There has been a continuous loss in wetland habitat. An estimated 75% of the original tidal wetlands of San Pablo Bay have been converted to other uses. There have also been significant losses to seasonal wetland and adjacent upland habitats. Wetland and adjacent habitats in the watershed are critically-important to migratory waterbirds on the Pacific Flyway and several endangered species. Urban and agricultural encroachment, pollution, and exotic species are ongoing threats to the wetland habitat. Where there were once numerous species of fish, insects, and benthic organisms within the freshwater channel and saltwater interface environments, there are fewer species.
Riparian Habitat - Riparian habitat loss is related to channel degradation, urban and agricultural encroachment, and flood control and navigation channelization. Riparian habitat has not regenerated in the face of the channel problems. The channel reaches that exhibit the greatest losses in habitat are closely correlated with the percentage of the watershed upstream that is developed. The subwatersheds that are the most highly developed (urban and agricultural) exhibit the most degraded riparian habitat. Native species that dependent on riparian corridors for their survival have experienced a steady decline in abundance and diversity. Invasive species, such as the Arundo donax, Spartina alterniflora, Lepidium lalifolium, Centaurea solstilialis, Foeniculum vulgare, are displacing native vegetation throughout the San Pablo Bay watershed. Invasive plants alter the ecosystem's bio-diversity, leading to a decline in habitat suitable for native species.